



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,098	08/22/2003	Sean Burke	23627-07932	9868
758 7590 01/12/2007 FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041			EXAMINER LEE, RICHARD J	
			ART UNIT	PAPER NUMBER
			2621	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/647,098	Applicant(s) BURKE ET AL.	
	Examiner Richard Lee	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: ____. |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :3/29/04, 8/6/04, 3/28/05, 2/9/06, 4/4/06.

Art Unit: 2621

1. The applicants are informed that the search report and written opinion for PCT/US04/27392 as listed on the IDS filed March 28, 2005 have not been considered by the Examiner since the PCT search report and written opinion are not considered publications. Similarly, the supplementary European search report as listed in the IDS filed April 4, 2006 has not been considered since the search report is not considered a publication. A line has been drawn through the respective citations accordingly as shown in the attachments.

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 33 and 34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 33 is directed to a computer readable medium having stored thereon instructions executed by a processor in a surveillance system as recited in the preamble, and the body of the claim recites a series of steps. Claim 33 is considered non-statutory subject matter under 35 U.S.C. 101 since the preamble defines a computer program per se, and does not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized (see MPEP 2106). Since dependent claim 34 is directed to further limitations based on the computer readable medium of claim 33, claims 33 and 34 as a whole for reasons above do not fall within the statutory classes set forth in 35 U.S.C. 101.

Art Unit: 2621

4. Claims 12, 18, 22, 24, 26, and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For examples:

(1) claim 12, line 1, after “awareness”, “management” should be properly inserted in order to provide proper antecedent basis for the same as specified at claim 1, lines 7-8;

(2) claim 12, line 2, “the spherical imagery” shows no clear antecedent basis;

(3) claim 12, line 2, “the motion detection module” shows no clear antecedent basis;

(4) claim 18, line 3, after “awareness”, “management” should be properly inserted in order to provide proper antecedent basis for the same as specified at claim 1, lines 7-8;

(5) claim 22, line 1, after “detection”, “event” should be properly inserted in order to provide proper antecedent basis for the same as specified at claim 21, line 5;

(6) claim 24, line 2, after “spherical”, “image” should be properly inserted in order to provide proper antecedent basis for the same as specified at claim 21, line 3;

(7) claim 24, line 3, after “spherical”, “image” should be properly inserted for clarity (see above item (6));

(8) claim 26, line 2, “the situational awareness map” shows no clear antecedent basis; and

(9) claim 21, line 1, “the sensor system map” shows no clear antecedent basis.

Art Unit: 2621

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-12, 14-31, 33, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Hendricks et al (US 2004/0010804 A1).

Hendricks et al discloses an apparatus for video access and control over computer network as shown in Figures 1, 2, 3A, 3B, 7A, 7B, 8A, 8B, 9A, 9B, 10-14, and 20, and the same surveillance system, method of capturing, delivering and displaying spherical image data and motion detection data to a management console, management console for a surveillance system, user interface for a surveillance system, and computer readable medium having stored thereon instructions executed by a processor in a surveillance system as claimed in claims 1-12, 14-31, 33, and 34, comprising the same sensor subsystem for providing real time spherical image data and surveillance data (see 104, 104' of Figure 3A, sections [0038], [0086], [0096], [0136] to [0141], [0152] to [0157]); a network (120 of Figure 3A) operatively coupled to the sensor system for delivering the spherical image data and surveillance data to a management console (see Figures 10-14); a management console (see Figures 10-14, sections [0038], [0086], [0096], [0136] to [0141], [0152] to [0157]) operatively coupled to the network for receiving the spherical image data and the surveillance data and generating a spherical view display using the spherical image data and a situational awareness management display (automatic monitoring and tracking of objects, and providing alerts on display, see sections 0154] to [0157] using the surveillance

Art Unit: 2621

data and the motion detection data; wherein the sensor subsystem provides non-image data to the management console via the network and the management console displays the non-image data on the situational awareness management display together with the surveillance data, wherein the non-image data is alarm data generated by an alarm source (i.e., displaying an alert for a person in an automatic monitoring and/or tracking of an event, the alert being representative of the alarm data that is displayed with the surveillance data, see sections [0152] to [0157], Figures 10-14); a data repository image database (see sections [0063], [0096], [0136] to [0141], [0152], and [0157]) operatively coupled to the network for recording the spherical image data, wherein the data repository image data further comprises an image recorder for recording the spherical image data and an image player for playing back the spherical image data on the spherical view display in response to a user request, wherein the data repository supports multiple physical repository types; an image broadcaster for broadcasting the spherical image data on the network to one or more subscribers (see sections [0096], [0134], [0179]); an image compressor (i.e., 108, 114, 118, 136 of Figure 3A) for compressing the spherical image data; wherein the surveillance data is motion detection event data, and a motion detection module coupled to the network for generating motion detection event data in response to detecting motion in spherical image data received from the network, the motion detection module detects motion in a selected portion of the spherical image data received from the network (see sections [0096], [0154] to [0157], [0161]); the situational awareness management display comprises a sensor system map for displaying the location of one or more sensors in the sensor subsystem (see Figure 7B, 13, 14, sections [0053], [0138], [0139]); wherein the situational awareness display includes user controls for setting a zone in the spherical imagery where the motion detection module will perform

Art Unit: 2621

motion detection (see sections [0153] to [0157]); wherein the management console includes an image decompressor for decompressing the spherical image data compressed in the sensor subsystem and displays the decompressed spherical imagery on the spherical view display, and decompressing the compressed spherical data at the management console prior to display (see sections [0096], [0113]); wherein the motion detection module detects motion in the spherical image data by comparing a current spherical video frame to a reference spherical video frame and determining differences according to user defined settings, wherein the surveillance data is used to track a moving object in the spherical image data, and displaying the moving object on the situational awareness map and the user interface (i.e., pixel changes of video within the motion detection processor thereby detecting movement of a lion for further tracking and monitoring of the lion, see sections [0096], [0154], [0155], [0161]); wherein metadata (i.e., multiple segments of video under surveillance, the multiple segments being metadata, see sections [0153], [0155]) is generated in the sensor subsystem and transmitted over the network for use by the management console to build the situational awareness display; wherein at least one of the spherical image data and surveillance data is time stamped (see Figure 20 and section [0169]); a mirror control operatively coupled to the motion detection module for controlling a pan/tilt/zoom device in response to motion detection event data generated by the motion detection module (see sections [0082], [0152] to [0157], [0164] to [0166]); monitoring the spherical image data for motion, responsive to detection of motion, generating motion detection event data, delivering the spherical image data and motion detection event data to a management console via a network, and at the management console, generating a spherical view display using the spherical image data (see Figures 3A, 3B, 10, 14, sections [0096], [0015] to [00157]; a

Art Unit: 2621

processor (i.e., 200 of Figure 9A, and see section [0096]) for receiving spherical image data and surveillance data from a sensor subsystem via a network (i.e., 120 of Figure 3B); a spherical sensor display (see 302, 204, 206, 208, 210 of Figure 10) coupled to the processor for displaying spherical image data, and display engine for integrating the spherical image data and surveillance data; a situational awareness display (see sections [0152] to [0157]) coupled to the processor for displaying surveillance data; a user interface (see sections [0038], [0082], [0152] to [0157], Figure 14) for allowing a user to configure the sensor subsystem, the user interface coupled to the display image for displaying the integrated spherical image data and surveillance data, and a control portion for controlling the display portion of the user interface; and a display portion for displaying a sensor system map showing sensor coverage area (see Figures 7B, 13, and 14).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al as applied to claims 1-12, 14-31, 33, and 34 in the above paragraph (5), and further in view of Jacquin et al (5,764,803).

Hendricks et al discloses substantially the same surveillance system, method of capturing, delivering and displaying spherical image data and motion detection data to a management console, management console for a surveillance system, user interface for a surveillance system, and computer readable medium having stored thereon instructions executed by a processor in a surveillance system as above, but does not particularly disclose though wherein the spherical

Art Unit: 2621

view display includes user controls for providing a high-resolution image of a selected portion of the spherical view display as claimed in claim 13. However, Jacquin et al discloses a motion adaptive modeling of scene content, and teaches the conventional coding of selected portions of an image such as the person's face with higher resolution via a finer quantization parameter (see column 1, lines 45-67, column 2, lines 42-56, column 3, lines 2-25). Therefore, it would have been obvious to one of ordinary skill in the art, having the Hendricks et al and Jacquin et al references in front of him/her and the general knowledge of higher resolution image codings, would have had no difficulty in providing the high resolution images of a selection portion of an image as taught by Jacquin et al as part of the user control system within the spherical view display of Hendricks et al for the same well known assignment of a better resolution image to an area of interest for further comparison, analysis, and viewing purposes as claimed.

9. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al as applied to claims 1-12, 14-31, 33, and 34 in the above paragraph (5), and further in view of Urisaka et al (US 2001/0024233 A1) and Jacquin et al (5,764,803).

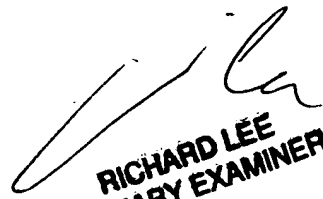
Hendricks et al discloses substantially the same surveillance system, method of capturing, delivering and displaying spherical image data and motion detection data to a management console, management console for a surveillance system, user interface for a surveillance system, and computer readable medium having stored thereon instructions executed by a processor in a surveillance system as above, but does not particularly disclose wherein the sensor system is a three-dimensional map showing location and orientation of sensors using location and attitude information associated with the sensors as claimed in claim 32. However, Urisaka et al discloses a camera control system as shown in Figures 3 and 4, and teaches the conventional use of a two

Art Unit: 2621

dimensional map showing the location and orientation of sensors (see sections [0071] to [0074]). Urisaka et al is however silent as to providing a three dimensional map as claimed. However, Sawhney et al discloses a method of pose estimation and model refinement for video representation of a three dimensional scene as shown in Figure 4, and teaches the conventional three dimensional modeling/mappings in general as well as the determination of the location and orientation of sensors using location and attitude information within surveillance systems (see sections [0011], [0032], [0068], [0069], [0091], [0092]). Therefore, it would have been obvious to one of ordinary skill in the art, having the Hendricks et al, Urisaka et al, and Sawhney et al references in front of him/her and the general knowledge of camera mapping configurations within surveillance systems, would have had no difficulty in a three dimensional mapping system showing location and orientation of sensors using location and attitude information associated with the sensors as taught in the combination of Urisaka et al and Sawhney et al within the surveillance system of Hendricks et al for the same well known visual identification to a user/surveillance personnel of the area of surveillance with camera location and orientation information for the same well known overall view and control of a surveillance system purposes as claimed.

Art Unit: 2621

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (571) 272-7333. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.



**RICHARD LEE
PRIMARY EXAMINER**

Richard Lee/rl

1/5/07

